

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) An apparatus for aspirating, irrigating and/or cleansing wounds, comprising:

a fluid flow path, comprising a conformable wound dressing, having a backing layer which is capable of forming a relatively fluid-tight seal or closure over a wound, at least one inlet passageway in communication with a space under the backing layer and at least one offtake passageway in communication with the space under the backing layer;

a fluid reservoir in flow communication with the inlet passageway configured to provide irrigant to the wound;

means for supplying thermal energy to the fluid in the wound,

means for providing simultaneous aspiration and irrigation of the wound such that irrigant may be supplied to fill the flow path from the fluid reservoir via the inlet passageway while fluid including wound exudate is aspirated by the first fluid moving device through the offtake passageway; and

a regulator in communication with at least one of the inlet passageway and the offtake passageway and configured to at least regulate a rate of fluid flowing through at least one of the inlet passageway and the offtake passageway;

wherein:

the means for providing simultaneous aspiration and irrigation of the wound comprises a first fluid moving device applied downstream of and away from the wound dressing and is configured to apply negative pressure to the wound; and

the regulator is configured to hold negative pressure on the wound at a steady level while simultaneous aspiration and irrigation is provided to the wound.

2. (Previously Presented) An apparatus according to claim 1, wherein the means for supplying thermal energy to the fluid in the wound comprises a heater and/or conductively heated component of the apparatus flow path in direct conductive contact with the irrigant and/or wound exudate.

3. (Previously Presented) An apparatus according to claim 1, wherein the means for supplying thermal energy to the fluid in the wound comprises a radiative heater of the irrigant fluid and/or wound exudate.

4. (Previously Presented) An apparatus according to claim 1, wherein the means for supplying thermal energy to the fluid in the wound comprises a conductively heated component of the apparatus flow path in direct conductive contact with the irrigant and/or wound exudate, in turn heated by irradiation from a radiative heater.

5. (Previously Presented) An apparatus according to claim 1, wherein the means for providing simultaneous aspiration and irrigation of the wound further comprises at least one of a second fluid moving device applied to the inlet passageway upstream of and towards the wound dressing, means for aspirate flow regulation in flow communication with the inlet passageway, and means for supply flow regulation in flow communication with the inlet passageway.

6. (Previously Presented) An apparatus according to claim 1, wherein the fluid in the offtake passageway downstream of the wound dressing is aspirated into a collection vessel, and the first device acts on fluid from the collection vessel.

7. (Previously Presented) An apparatus according to claim 5, wherein the first device and/or second device is a fixed throughput device, and the means for providing simultaneous aspiration and irrigation of the wound also comprises at least one of means for supply flow regulation connected to a inlet passageway, and means for aspirate flow regulation connected to the offtake passageway.

8. (Previously Presented) An apparatus according to claim 5, wherein the first device and/or second device is a variable-throughput device, and the means for providing simultaneous aspiration and irrigation of the wound does not comprise other means for aspirate flow regulation connected to the offtake passageway and/or means for supply flow regulation, in flow communication with an inlet passageway.

9. (Previously Presented) An apparatus according to claim 1, wherein the means for providing simultaneous aspiration and irrigation of the wound further a second fluid moving device applied to the irrigant in the inlet passageway upstream of the wound dressing.

10. (Previously Presented) An apparatus according to claim 9, wherein the first device and/or second device is a fixed throughput device, and the means for providing

simultaneous aspiration and irrigation of the wound also comprises at least one of means for supply flow regulation connected to an inlet passageway, and means for aspirate flow regulation, connected to an offtake passageway.

11. (Previously Presented) An apparatus according to claim 9, wherein the first device and/or second device is a variable-throughput device, and the means for providing simultaneous aspiration and irrigation of the wound does not comprise other means for aspirate flow regulation connected to the offtake passageway and/or other means for supply flow regulation connected to the inlet passageway.

12. (Previously Presented) An apparatus according to claim 1, wherein the means for supplying thermal energy to the fluid in the wound causes the fluid in the wound to reach temperatures between 36° C and 38° C.

13. (Previously Presented) An apparatus according to claim 1, further comprising means for supply flow regulation in communication with the inlet passageway.

14. (Previously Presented) An apparatus according to claim 1, wherein the fluid reservoir is connected by the inlet passageway via the means for supply flow regulation.

15. (Previously Presented) An apparatus according to claim 1, further comprising means for aspirate flow regulation in communication with the offtake passageway.

16. (Previously Presented) An apparatus according to claim 1, wherein the regulator is configured to control the speed of the first fluid moving device or a second fluid moving device.

17. (Previously Presented) An apparatus according to claim 1, wherein the regulator is a flow valve configured to increase or decrease the rate of fluid flowing through at least one of the inlet passageway and the offtake passageway.

18. (Previously Presented) An apparatus according to claim 1, wherein the regulator is a flow valve integral to at least one of the first fluid moving device and a second fluid moving device.

19. (Previously Presented) An apparatus according to claim 1, wherein the means for providing simultaneous aspiration and irrigation of the wound comprises a variable speed pump, the variable speed pump comprising the first fluid moving device and the regulator.

20. (Previously Presented) An apparatus according to claim 1, wherein the means for providing simultaneous aspiration and irrigation of the wound comprises a peristaltic pump, the peristaltic pump comprising the first fluid moving device and the regulator.

21. (Currently Amended/Withdrawn) An apparatus according to claim 1, further for aspirating, irrigating and/or cleansing wounds, comprising:

a backing layer capable of forming a fluid-tight seal over a wound;

an inlet passageway arranged to provide fluid to the wound;

an offtake passageway arranged to withdraw fluid from the wound;

a fluid moving device in communication with at least one of the inlet passageway and the offtake passageway and configured to move fluid through at least one of the inlet passageway and the offtake passageway;

a regulator in communication with at least one of the inlet passageway and the offtake passageway and configured to at least regulate a rate of fluid flowing through at least one of the inlet passageway and the offtake passageway;

a heat source configured to heat at least the fluid in the inlet passageway; and

a pressure monitor configured to monitor a level of negative pressure created by the apparatus under the backing layer;

wherein:

the apparatus is configured to provide simultaneous aspiration and irrigation to the wound such that fluid may be supplied to the wound from a fluid reservoir via the inlet passageway while fluid is aspirated through the offtake passageway; and

the regulator is configured to maintain negative pressure on the wound at a steady level while simultaneous aspiration and irrigation is provided to the wound, based on feedback provided by the pressure monitor regarding the level of negative pressure between the backing layer and the wound.

22. (Currently Amended/Withdrawn) An apparatus according to claim 21, wherein the means for supplying thermal energy to the fluid in the wound comprises a heat source comprising the heat source comprises a heater and/or conductively heated component in direct conductive contact with the fluid flowing through at least one of the inlet passageway and the offtake passageway.

23. (Currently Amended/Withdrawn) An apparatus according to claim 21, wherein the means for supplying thermal energy to the fluid in the wound comprises a heat source comprising the heat source comprises a radiative heater of the fluid flowing through at least one of the inlet passageway and the offtake passageway.

24. (Currently Amended/Withdrawn) An apparatus according to claim 21, wherein the means for supplying thermal energy to the fluid in the wound comprises a heat source comprising the heat source comprises a conductively heated component of the apparatus flow path in direct conductive contact with the irrigant and/or wound exudate, in turn heated by irradiation from a radiative heater.

25. (Currently Amended/Withdrawn) The apparatus of claim 21, wherein the means for supplying thermal energy to the fluid in the wound comprises a heat source configured so that the fluid maintains the wound at an approximately normothermic range to optimize the metabolic activities of physiologically active components within the backing layer and promote wound healing.

26. (Currently Amended/Withdrawn) An apparatus according to claim 21, wherein the means for supplying thermal energy to the fluid in the wound comprises a heat source ~~heat source~~ is mounted in, on, at, or near the fluid reservoir.

27. (Previously Presented) The apparatus of claim 16, wherein the fluid moving device is in communication with the inlet passageway and is configured to move fluid through the inlet passageway, and the regulator comprises a second fluid moving device in communication with the offtake passageway and configured to regulate the rate of fluid flowing through the offtake passageway and to move fluid through the offtake passageway.

28. (Previously Presented) The apparatus of claim 21, wherein the regulator comprises a variable speed pump.

29. (Previously Presented) The apparatus of claim 21, wherein:

the fluid moving device is in communication with the inlet passageway and is configured to move fluid through the inlet passageway;

the regulator comprises a second fluid moving device in communication with the offtake passageway and is configured to move fluid through the offtake passageway; and

the regulator is configured to regulate the rate of fluid flowing through the offtake passageway.

30. (Previously Presented) The apparatus of claim 29, wherein the regulator comprises a valve configured to vent the wound from atmosphere.

31. (Previously Presented) The apparatus of claim 21, wherein the pressure monitor is connected to a monitor offtake passageway.

32. (Previously Presented) An apparatus according to claim 21, wherein the regulator is configured to control the speed of at least one of the fluid moving device and a second fluid moving device.

33. (Previously Presented) An apparatus according to claim 21, wherein the regulator is a flow valve configured to increase or decrease the rate of fluid flowing through at least one of the inlet passageway and the offtake passageway.

34. (Previously Presented) An apparatus according to claim 21, wherein the regulator is a flow valve integral to at least one of the fluid moving device and a second fluid moving device.

35. (Previously Presented) An apparatus according to claim 21, comprising a variable speed pump, the variable speed pump comprising the fluid moving device and the regulator.

36. (Previously Presented) An apparatus according to claim 21, comprising a peristaltic pump, the peristaltic pump comprising the fluid moving device and the regulator.